REMARKS / ARGUMENTS

Claims 58 – 67, 69 – 74, 76 – 85 and 87 – 92 stand withdrawn. Now that the allowability of claims drawn to the elected species has been shown, as discussed below, it is requested that these claims be rejoined with the present claims and be examined and found to be allowable.

No claims have been amended.

Claims 42 – 47 and 57 - 92 remain in the case.

No new matter has been added.

Rejection of claims 42 – 47, 57, 68, 75 and 86 under 35 USC §112, first paragraph, on the ground that the specification fails to contain sufficient written description to support the embodiment of the invention in which the elected species are used.

It is respectfully requested that the rejection of claims 42 – 47, 57, 68, 75 and 86 under 35 USC §112, first paragraph, on the ground that the specification fails to contain sufficient written description to support the embodiment of the invention in which the elected species, dinotefuran and a biological/fermentation product insecticide are used be reconsidered for the reasons discussed below and be withdrawn.

The Office has argued that when the present invention is tested against the factors described in *In re Wands*, 8 USPQ2d, 1400, 1404 (Fed. Cir. 1988), the specification provides insufficient written description to support the claims describing the elected species. For that embodiment, claim 42 would be interpreted as:

> A method for protecting a seed and/or shoots and foliage of a plant grown from the seed from damage by a pest by treating the unsown seed with a composition comprising dinotefuran and a biological/fermentation product insecticide.

In its discussion of the state of the prior art and the predictability of lack thereof (second Wands factor), the Office states that "the state of the prior art is that it involves screening *in vitro* and *in vivo* to determine which composition employed in the method exhibited the desired pesticidal activities", and that "the contemporary knowledge in the

art would prevent one of ordinary skill in the art from accepting any pesticidal regimen on its face." The Office then states that this unpredictability in the field requires "...each embodiment to be individually assessed for pesticidal activity.", and that "...in the absence of a showing of correlation between invention comprising dinotefuran biological/fermentation products claimed and degree of plant protection, one of ordinary skill in the art is unable to fully predict possible results ...due to the role of the huge number of pesticides set forth in the claims". In summary, the Office argues that the claimed invention is unpatentable without an example for each species.

First, it is important to note that dinotefuran is a single species, and the specification identifies two biological/fermentation product insecticides – avermectin and spinosad. That makes a total of two possible combinations covered by the claim to the elected species. Even if possible isomers of avermectin and spinosad are considered, this hardly grows to a huge number, and in the case of isomers, the skilled practitioner would reasonably expect similar activity.

Secondly, it should be noted that the present invention deals with the protection of plants from pests by the application of pesticides, not with the genetic transformation and production of antibodies at issue in *In re Wands*. It is maintained that referral to readily available texts, such as *The Pesticide Manual*, for example, would have quickly enabled the skilled practitioner to identify pesticides, their chemical structures, the pests against which they have activity, their mode of action, and many other factors. It is maintained, therefore, that the use of pesticides to protect plants from pests is far more predictable that the art under consideration in *In re Wands*, which the Office cites here.

The Applicant maintains that the interpretation urged by the Office does not find support in U.S. law for the following reasons. No precedent is known that supports the Office's argument that an example is required for each embodiment included in the claims. In fact, every aspect of a generic claim certainly need not have been carried out by an inventor, or exemplified in the specification, if reasonable detail is provided in the specification to enable members of the public to practice the invention. *Genentech, Inc. v. Novo Nordisk, A/S*, 42 USPQ2d, 1001 (Fed. Cir. 1997). What is required by 35 USC §112, first paragraph, is a written description in full, clear, concise, and exact terms as

to enable any person skilled in the art to make and use the claimed invention, and this the present specification has provided.

In its discussion of the experimentation needed to make or use the invention (the third Wands factor) and the existence of working examples (the sixth Wands factor), the Office argues that the quantity of experimentation is undue, because one would first need to determine biological/fermentation product insecticides and then determine which of these when combined with dinotefuran would effectively protect plants. In the present case, this means that the artisan would have to pick one of two possible combinations (dinotefuran/abamectin or dinotefuran/spinosad) and then test them according to well known protocols that are described in the specification. The specification provides a clear description of the production and use of the claimed combination and it also provides an example that, even though it does not include the elected species, provides a clear, concise, and exact description of how the claimed combination could be applied. Thus, in order to verify the utility of the entire scope of the claims drawn to the elected species, the skilled artisan would have to prepare and apply two combinations according to the directions provided in the specification. With respect, it is maintained that such experimentation is far from being exhaustive or undue.

In its application of the eighth Wands factor (the level of skill in the art), the Office argues that the level of skill is high, but then again reasserts the argument that "...each embodiment of the invention is required to be individually assessed for pestidical activity by *in vitro* and *in vivo* screening to determine which compositions exhibit the desired pesticidal activity." Again, there is no support for this assertion, and the Applicant respectfully maintains that it is without legal precedent.

Accordingly, it is maintained that the present specification meets every requirement of the first paragraph of 35 USC §112, and it is respectfully requested that the present ground of rejection be reconsidered and withdrawn.

Nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1, 2, 20, 21, 28 and 42 of U.S. Patent No. 6,593,273 to Asrar *et al.*

It is respectfully requested that action to overcome this ground of rejection be

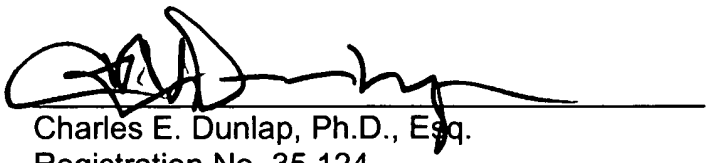
held in abeyance until patentable subject matter has been identified.

Request for reconsideration:

It is respectfully requested that the claims be re-examined in view of the amendments and the remarks/ arguments that are discussed above and be found to be allowable. If one or all of the claims are deemed to not be allowable, the Examiner is invited to call the undersigned attorney at the number given below for resolution of any remaining issues.

Respectfully requested,

NELSON MULLINS RILEY & SCARBOROUGH, LLP



October 16, 2006
Date

Charles E. Dunlap, Ph.D., Esq.
Registration No. 35,124

1320 Main Street, 17th Floor
Columbia, SC 29201
Telephone: (864) 250-2238
Facsimile: (803) 255-9831